U.S. Patent Application Serial No. 10/659,254 Amendment filed October 27, 2005 Reply to OA dated June 27, 2005

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

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Claim 1 (original): A method for regulating state of charge in a battery assembly including a plurality of secondary cells as unit cells which are connected in series,

wherein electric charge is transferred from the largest unit cell having the largest voltage across the cell among said plurality of the unit cells to a capacitor so that the voltage across said capacitor may be made higher than the voltage across said largest unit cell, and thereafter, the electric charge is transferred from said capacitor to the smallest unit cell having the smallest voltage across the cell, whereby the respective voltages across said unit cells are equalized.

Claim 2 (original): An apparatus for regulating state of charge in a battery assembly including a plurality of secondary cells as unit cells which are connected in series,

said apparatus comprising;

voltage detecting means for detecting respective voltages across said unit cells, and equalizing means for equalizing the respective voltages across said unit cells by transferring electric charge from the largest unit cell having the largest voltage across the cell to a capacitor, and

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thereafter, by transferring the electric charge from said capacitor to the smallest unit cell having the smallest voltage across the cell,

wherein said equalizing means transfers the electric charge from said largest unit cell to said capacitor so that the voltage of said capacitor may be made higher than the voltage across said largest unit cell.

Claim 3 (currently amended): An apparatus for regulating state of charge in a battery assembly including a plurality of secondary cells as unit cells which are connected in series,

said apparatus comprising;

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voltage detecting means for detecting respective voltages across said unit cells, and
equalizing means for equalizing the respective voltages across said unit cells by transferring
electric charge from the largest unit cell having the largest voltage across the cell to a capacitor, and
thereafter, by transferring the electric charge from said capacitor to the smallest unit cell having the
smallest voltage across the cell,

wherein said equalizing means transfers the electric charge from said largest unit cell to said capacitor so that the voltage of said capacitor may be made higher than the voltage across said largest unit cell. The apparatus for regulating state of charge as claimed in claim 2, wherein said equalizing means connects said largest unit cell to said capacitor by way of a voltage converter.

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Claim 4 (original): The apparatus for regulating state of charge as claimed in claim 3, wherein said voltage converter is of a voltage raising type which will raise the voltage across said largest unit cell up to the largest operational voltage of said unit cells.

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